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ABSTRACT

This guide to affective social skill development discusses these points: (1) The targets of our efforts are first of all teachers, then the peer group, and finally individuals, (2) Systematic training of teachers, both in the cognitive and experimental basis of human relationships, is a necessary prerequisite to the implementation and development of an affective-social skills program, (3) needs assessment of individual problems and support systems constitute an imperative prerequisite for implementing an affective-social development program, (4) Risk factors and support systems can be optimally identified for individuals in a group setting through the use of multi-method, multi-trait assessment and computer analysis and feedback; (5) Developmental strategies of intervention can be parsimoniously grouped under three functional classifications (feedback, social modeling and reinforcement, and environmental change), (6) Developmental interventions are easier than crisis reconstructions, and are most effective when teachers are provided direct information regarding high-risk, low-support children that they can apply individually and in small groups; (7) Change is developmental and multi-dimensional. It does not occur uniformly; (8) Temperament-aptitude clusters are associated with risk-support dimensions and mediate susceptibility to treatment and change outcomes; and (9) change in affective-social skills can and should be measured by an array of indicators. (Author/JLL)

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A Taxonomy of Affective-Social Skill Intervention

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Paper prepared for : "Matching Needs to Intervention Strategies: An Ecological Approach for the Elementary School." American Personnel & Guidance Meeting Dallas Texas, March 5-7, 1977

H01 The targets of our efforts are first of all teachers, then the peer group, and finally individuals.

H02 Systematic training of teachers both in the cognitive and experiential basis of human relations is a necessary prerequisite to the implementation and development of an affective-social skills program.

H03 Needs assessment of individual problems and support systems constitute an imperative prerequisite for implementing an affective-social development program.

H04 Risk factors and support systems can be optimally identified for individuals in a group setting through the use of multi-method, multi-trait assessment and computer analysis and feedback.

H05 Developmental strategies of intervention can be parsimoniously grouped under three functional classifications: (1) feedback, (2) social modeling and reinforcement, and (3) environmental change.

H06 Developmental interventions are easier than crisis reconstructions. They are most effective when teachers are provided direct information regarding high-risk, low-support children that they can apply individually and in small groups.

H07 Change is developmental and multi-dimensional. It does not occur uniformly.

H08 Temperament-aptitude clusters are associated with risk-support dimensions and mediate susceptibility to treatment and change outcomes.

H09 Change in affective-social skills can and should be measured by an array of indicators.

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[1] This taxonomy is a brief summary of a larger work by the author. It was prepared for a presentation by James R. Barclay University of Kentucky "Matching Needs to Intervention Strategies: An Ecological Approach for the Elementary School," American Personnel & Guidance Annual Convention, Dallas Texas, March 5-7, 1977.

A Taxonomy of Affective-Social Skill Intervention

Scarcely anyone in education doubts the value of systematic training and development in affective and social skills. Skill development whether it be of the academic achievement type or relating to affective and social functioning is an all encompassing goal of education. For we cannot really doubt the priority of skill development as a target of education. Our knowledge of human development has led us to specify stages in cognitive development. There can be little doubt that there are likewise stages in affective and social development. And therein lies the problem. Since we are dealing with phenomena that are at once emeshed in cognitive development as well as environmental stimulation, how shall we attempt to develop these skills systematically ?

In this paper I will focus on this broad question by dealing with three major sub-questions:

1. What are the real targets of our efforts ?
2. How can we mobilize our efforts ?
3. How can we evaluate the consequences of our efforts ?

1. The targets of Our Efforts

HO 1 The targets of our efforts are first of all teachers, then the peer group, and finally individuals.

Affective and social skills are byproducts of individual differences. There is considerable research that provides us with substantive evidence regarding the major factors that influence individual differences. We know that heredity plays an important role in such differences. An average estimate of the degree of variability associated with genetics is about 80 percent (Gage & Berliner, 1975, p. 211).

Next to heredity comes the great impact of socio-economic class, parental education, style of living and cultural inheritance. This factor has been viewed as of paramount importance in determining the outcomes of schooling by Coleman (1966). In addition, the fact that individuals of like socio-economic status tend to marry each other brings about a powerful interaction between environmental influences and genetic ones. In neither of these instances can education make any real and substantive influence. Both of them are really beyond the control and influence of the schools.

What then is left ? What is left is the complex ecological climate of the school. Here expectations or perceptual directions play an important role in setting the aspirations, goals, methods, and reinforcements available and dispensed to individuals in the setting. The reality of such expectation components in the development of learning skills has been amply documented in a number of studies and documented well by Brophy and Good (1974).

Expectations are directly manipulable by the school system in contrast with the products of heredity and socio-economic status. Expectations relate to a host of behavioral and attitudinal variables that occur within the classroom and are also related to a series of teacher-learned attitudes and perceptions that relate to backgrounds and experience from her own living. Most specifically, these expectation can be related to skill manifestations, efforts and approximations. Moreover, the teacher imposes directly or indirectly those heuristic criteria of performance which must be met by individuals in a classroom environment.

Explicitly or implicitly, the teacher not only sets the goals and the aspiration level, but designs the functional exercise of learning, measures the degree of application and approximation to her goals, and dispenses reinforcement or punishment. Individual differences are in direct reaction with these goals, methods and criteria as well as reinforcement-punishment consequences. For skill deployment is dependent on both the structural capacity of the individual being elicited by the environmental stimulus and past learning. The combination of capacity, stimulation and past learning results in a specific function. For example, an arithmetic skill can be demonstrated by a teacher calling upon a student (the eliciting stimulus) to go to the blackboard and work on a problem (the functional outcome of capacity times learning interaction with the eliciting stimulus). In similar vein, a social skill can be manifested when a child in a peer group discussion responds to an abrasive remark from a peer (an eliciting stimulus) by a conciliatory interpersonal response (the functional result of structural capacity and learned behavior demonstrating itself in this context). Failure to learn task-oriented skills or social skills may have hereditary-home-environmental components that make the eliciting of appropriate skills difficult. But it is very likely that failure to develop such skills within the school setting is a function of acquired learned behavior.

Two problems limit our ability to cope with such differential skill development. The first of these is related to expectations. All too often teachers make a judgment about achievement or social skill development based on their assessment of the combination of hereditary and environmental influences. This often results in what has been called the "self-fulfilling prophecy." The second reason is that we fail to recognize the fact that existing

individual differences make it more or less easy, more or less difficult to develop systematic social and affective skills. Thus in effect, some children need more practice and help than others both in what relates to academic achievement as well as the social-affective domain.

Bypassing the question of values as to whether there should be some uniform standard of adequate cognitive as well as social-affective skill display, and who should impose it, it would appear to me that a relative amount of both academic and social skills should be developed by all students that will enable them to function adequately in a social setting. This is tantamount to holding that a minority culture need not abandon their own culture, but should be conversant with those expectations that will enhance their success operating within a majority culture.

Since teachers are so important in the ecology of the classroom, it makes sense that our efforts to improve both academic skill development and social-affective skill development focus first on the teacher. For it is the teacher who possesses the key to the psychological support system of the environment for an individual in that environment. The ability to recognize individual differences, to understand expectations, and to relate the two to the task of systematically building affective, social, and achievement skills must be taught and assimilated by teachers. The recognition of the phasing of cognitive with affective and social must be demonstrated through actual experience in a human relations training procedure.

HO 2 Systematic training of teachers both in the cognitive and experiential basis of human relations is a necessary prerequisite to the implementation and development of an affective-social skills program.

Though a secondary target of our efforts must be directed at the peer group as another important component in the psychological support system needed for individual growth and development, both this target and the ancillary ones of individual treatment, parental groups etc., are sequenced in relationship to the experiential training of the teacher.

The importance of the teacher engaging in both cognitive and experiential training has been amply documented by Aspy and Roebuck (1974) when they demonstrated the consequent effects of such training on the facilitation of student process behaviors. The work of Carhkuff and Berenson (1976) and the systematic program development of Gazda (1973) have provided methods for developing such skills in teachers.

Because teachers are really the primary change facilitators in the classroom , they must of necessity become the primary focus of our initial effort. To the extent that principals provide a major component of the teacher psychological support system it is likewise indispensable that they be supportive of such development. Otherwise even the training may be counter-productive as Aspy and Roebuck have demonstrated (1974). Counselors and school psychologists then function as facilitators of such human development skills in teachers and principals.

The skills that are developed via a systematic training program should include both a cognitive and experiential base for understanding human relations and individual differences, and some specific skills in relating these components to: (1) self-competency and self-reliance skills, (2) positive social interaction skills, (3) verbal skills including assertiveness, (4) self-control skills including acceptance of relative levels of ambiguity, (5) cognitive task-order skills, and (6) attitudinal feelings of positive value for others.

Though peer relations, and the question of recognition of individual differences are obviously extremely important in the development of an adequate support system, much of this is directly mediated by the modeling effect of the teacher and his or her ability to provide an exemplary role in effective human relations.

2. How Can We Mobilize Our Efforts ?

HO 3 Needs assessment of individual problems and support systems constitute an imperative prerequisite for implementing an affective-social development program.

Needs assessment can be a very broad concept. But there are two components that are central to an affective-social development program. One of these relates to the dimension of risk, and the other to the dimension of support system.
By risk is meant an actuarial construct that suggests a possible prognosis. We know from much research that a combination of lowered intelligence, inadequate achievement, and poor socioeconomic background can provide a reasonable basis for dropping out of school, crisis episodes, and ineffective learning.

Very often, but not invariably there are also problems that relate to poor study habits, inadequate social skills, lack of self-control and other definable clusters of what may be called problems. Thus the observation of problems does not necessarily relate to hereditary-socio-economic sources, but may coincide with them. The greater the accumulation of these structural and functional clusters of problems, the higher the risk that the individual will not fulfill the promise of his potential.

The second component central to a needs assessment is that of the classroom psychological support system. For the classroom is an ecology in which an individual grows developmentally or can be stunted in that growth and dry up. The specific components relating to the psychological support system of the child in the classroom are: (1) teacher expectations (with the host of perceptual overlays, implicit task assignments, and methods of reinforcing), and (2) the peer support system in which a child is liked, reinforced, ignored, disliked, punished by children in the same environment.

Many typical approaches to needs assessment do not obtain information relating to risk and psychological support. Attitude surveys based on self-report data are hard to interpret, given the problems of social desirability and other biases associated with asking questions of children. Behavioral observations, even when systematized, as in the Flanders' approach (1960) or the Wahler, House and Stambaugh method (1976) call for rigorous observer training, do not provide group-oriented criteria, and

are more applicable to specific research studies.

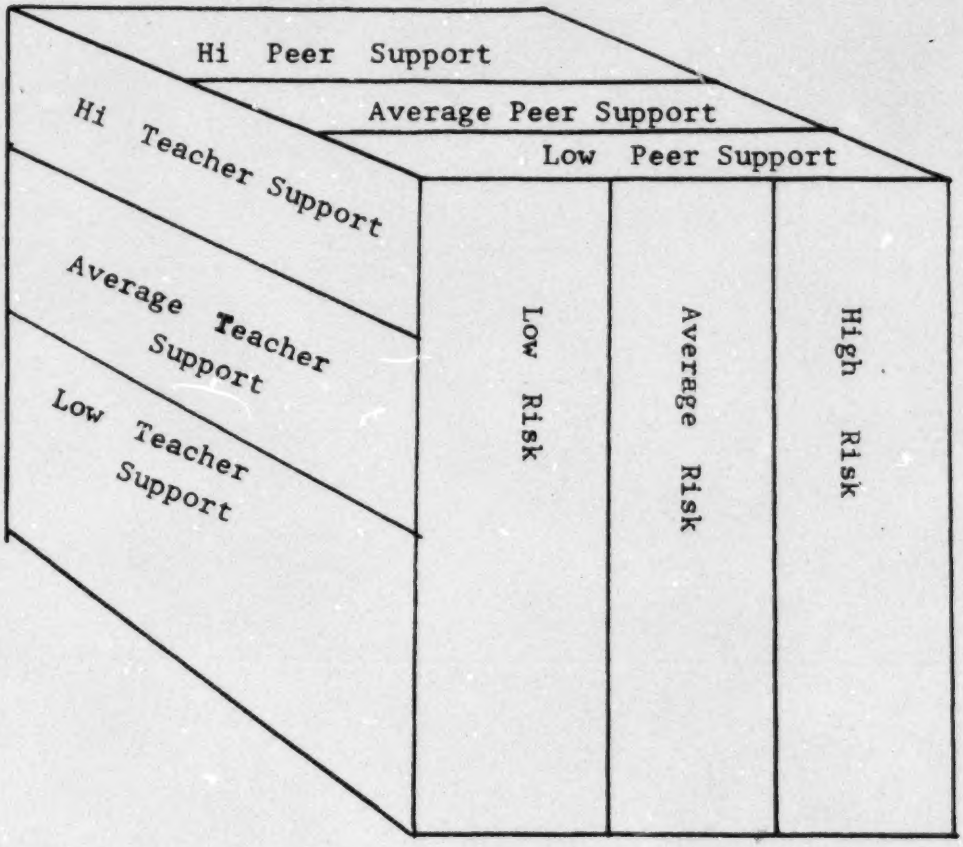
A more relevant approach to this type of needs assessment lies through the combined use of sociometrics (Gronlund, 1959) and teacher ratings (Gage, 1963). Both of these approaches have demonstrated validity for evaluating the functional outcomes of expectations. Sociometric judgments and teacher ratings provide a viable classification system for analyzing the support system of a child in a given environmental setting. Both sets of ratings are based on perceptions. Perceptions themselves are the byproduct of expectations which in turn are derived from informal and formal empirical observations. Thus by tapping the array of perceptions we can obtain a viable and contextually valid set of indices for classifying children in terms of the support system (Barclay, 1964).

Risk assessment includes a functional appraisal of level and rate of achievement, (in relationship to intelligence), the home support system, and the analysis of the intensity of problem areas such as inadequate self-competency, self-control deficits, verbal skill deficits, and social skill deficits.

The combining of these two major components in a needs assessment system can be done either informally through teacher and counselor design, or through a more structured computerized approach. The former method is more time consuming and requires more subjective analysis. The latter method provides for a more rigorous set of data with more direct feedback relying on national standardization information as applied to the local classroom unit. Figure 1 provides an example of how risk and support dimensions are capable of being used for a classification system.

Figure 1

Basic Needs Assessment Model



Explanation:

By risk is meant a weighted index including achievement (as related to intelligence and home support systems) and the frequency of observed problem areas.

By peer support is meant the frequency of positive choices as against negative choices and omissions.

By teacher support is meant the frequency of positive child descriptors as against negative descriptors or omissions.

Though there are nine cells indicated in Figure 1, it is obvious that the area of highest concern are those children who fall into the high risk, low peer and low teacher support combination. There is evidence that the combination of high risk and low support from peers and teachers is associated directly with a high dropout rate from school.[1]

HO 4 Risk factors and support systems can be optimally identified for individuals in a group setting through the use of multi-method multi-trait assessment and computer analysis and feedback.

Twenty years of experimentation and research has convinced the writer that the computer can be utilized humanistically and with optimum accuracy to identify individual differences, suspected problem areas, and psychological support systems. Still further, the computer can provide direct feedback to teachers including a direct prescription for altering the risk factor and increasing the support system for individuals.

Computerized assessment can be utilized advantageously for screening large masses of children within the context of their classroom.[2] It can also provide direct prescriptive feedback to teachers specifically taking into consideration both individual

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[1] In a follow-up study of 963 children tested in upper elementary and junior high classes four years after testing it was observed that 30 percent of all female dropouts and nearly 50 percent of all male dropouts had been in the cell of high risk and low peer and teacher support (Barclay, 1966).

[2] The computer has been used in a variety of applications to learning and assessment. For example, it can be used in early childhood assessment (Barclay & Barclay 1975), in junior high school, senior high school and college level learning problems (Barclay,1975), in the scoring and reporting of the Strong-Campbell Interest Inventory, and Interest Blank, the Minnesota Vocational Interest Inventory, the Ohio Interest Survey, the Adjective Check List, the California Psychological Inventory, the 16 PF Test , the MMPI and many others (National Computer Systems).

differences, the context of the group setting, and specific thresholds of problem behavior and support systems. The computer alone has the capability of providing to teachers who are the primary agents of developmental change those four features identified by Cromwell, Blashfield and Strauss(1975) as being integral needs for meaningful intervention: (1) background information, (2) specific contextual assessment characteristics, (3) a direct prescriptive suggestion for intervention, and (4) a level of prognosis.

HO 5 Developmental strategies of intervention can be parsimoniously grouped under three functional classifications: (1) feedback, (2) social modeling and reinforcement, and (3) environmental change.

Though there are many alternate strategies for coping with specific kinds of problem behavior and a number of alternate theories of counseling and classroom discipline, they can parsimoniously be classified in terms of their functional characteristics. Feedback whether it be direct or indirect, verbal or nonverbal , analysis of test scores, or counseling and advising is the major method of providing information back to individuals. Human relations training, mentioned earlier as a prerequisite to affective-social skill development, provides a basic sensitization of the teacher to methods of positive feedback. Along with feedback social modeling and positive social reinforcement provide a method for rewarding appropriate skill manifestations. Group experiences in problem-solving, simulation materials, supplementary learning procedures, and models both in the classroom and via television or filmed sequences can provide another important feature for promoting affective and social development. Finally, where feedback and social modeling are not strong enough, specialized learning environments may be

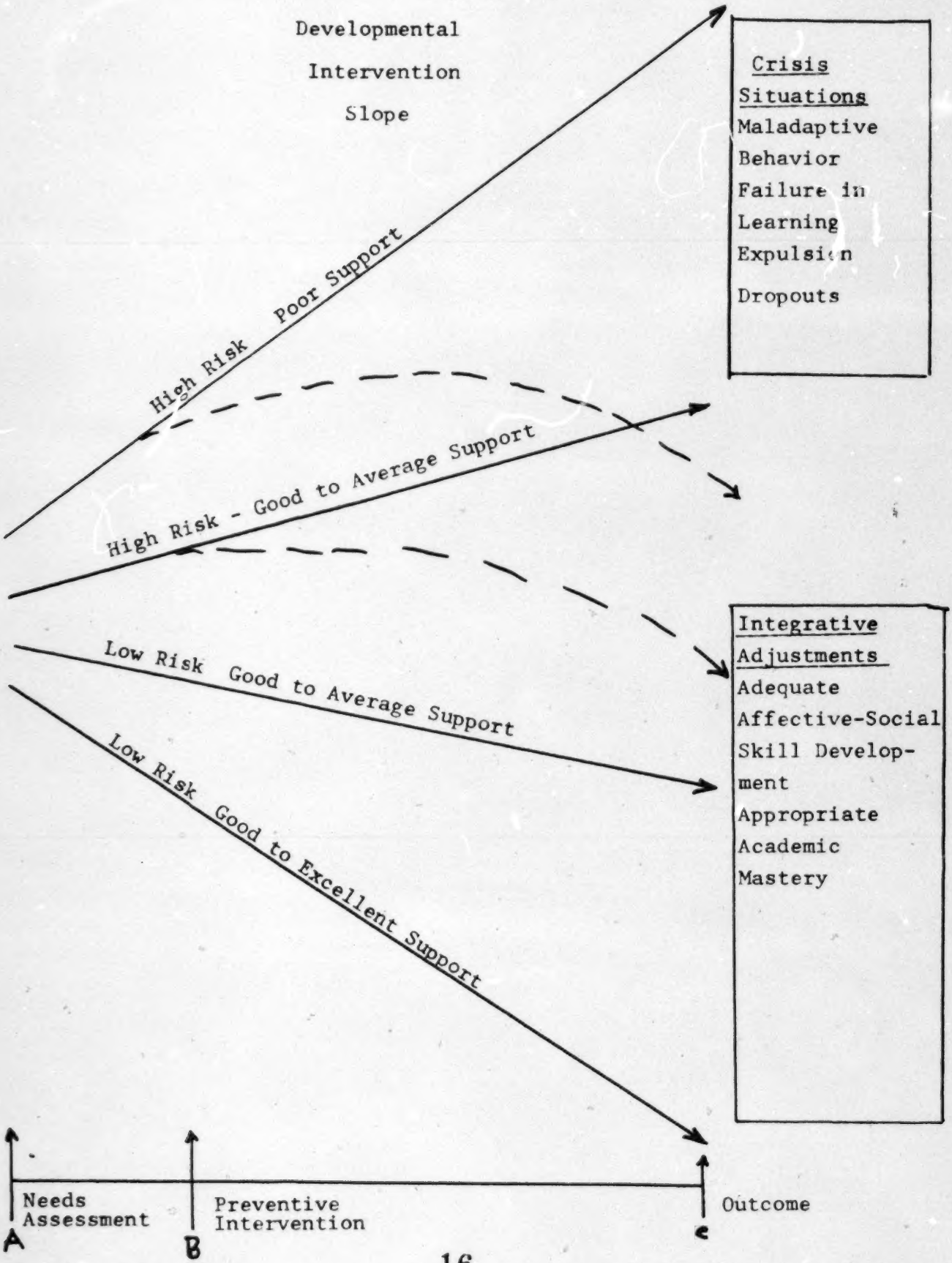
necessary to provide a total environment wherein children can learn such skills.

H06 Developmental interventions are easier than crisis reconstructions. They are most effective when teachers are provided direct information regarding high-risk low support children that they can apply individually and in small groups.

It is a fundamental postulate of this approach that crisis situations in human affairs do not occur suddenly and spontaneously without some prior indication. Children who suddenly erupt into menaces in the school, who assault others , who drop out of school have usually shown subtle but positive indicators of this developmental trend. Obviously, once a crisis situation has occurred there is little doubt in the minds of anyone that something must be done. But the efforts at developmental change often must cope with the effects of years of poor learning, and full blown antagonistic and anti-social attitudes. The whole history of the treatment of juvenile delinquency and of adult offenders in prison demonstrate amply the sparce success attending such efforts.

On the other hand, a developmental intervention at the time when it is beginning can often be handled through an increase of personal attention by the teacher, minor changes in teaching style, the use of positive reinforcement and the development of a positive peer-teacher support system. Unfortunately, our identification of the problem area is not as clear as in the case of a crisis. Thus we must be prepared to act once the pattern of inferences is clear. Figure 2 provides an illustration of the developmental intervention process from an actuarial view point.

Figure 2


Developmental
Intervention
Slope
Crisis
Situations
Maladaptive
Behavior
Failure in
Learning
Expulsion
Dropouts
High Risk Poor Support
High Risk - Good to Average Support
Low Risk Good to Average Support
Low Risk Good to Excellent Support
Integrative
Adjustments
Adequate
Affective-Social
Skill Develop-
ment
Appropriate
Academic
Mastery
Needs
Assessment
A
Preventive
Intervention
B
Outcome
C

In summary, we can mobilize our efforts in the development of an affective-social skill development program by a needs assessment procedure that identifies high-risk, low-support children in classrooms. This may be done either through the more tedious process of utilizing group sociometric and teacher rating data and examining other indicators relating to achievement and problem behavior, or through the use of a computer process designed to provide objective analysis of such data and in addition to provide direct prescriptive feedback to teachers.

In view of the fact that I have worked nearly twenty years on the development of a multi-trait, multi-method needs assessment system for analyzing individual differences, risk status, support system and problem areas, I am understandably partial to the Barclay Classroom Climate Inventory for use in the elementary school.[3]

The role of the counselor or school psychologist in this approach is to provide special planning resources and consultation to teachers on those individuals who require a more detailed plan of action. Another role of the counselor or school psychologist is to follow-up plans of action from time to time and to determine on an impressionistic basis the efficacy of the developmental plan.

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[3] The Barclay Classroom Climate Inventory (Barclay 1974, 1976) is a multi-trait, multi-method approach that utilizes self-report, peer nominations, and teacher ratings to ascertain the basic risk potential of an individual and his support system. It uses computer scoring and provides a direct prescription to teachers regarding what they can do to reduce the risk direction and to increase the support system of the individual. It does this by analyzing problem areas and looking at individual differences within the classroom setting.

3. How Can We Evaluate the Consequences of Our Efforts

HO 7 Change is developmental and multi-dimensional. It does not occur uniformly.

One of the foremost concepts in evaluation is the notion of change. We have not really explored the meaning of this concept sufficiently. Change implies both alteration and development. The alteration, however, has often been interpreted in terms of a statistically significant difference obtained by research methods. Though statistical methods are extremely helpful in improving the quality of our decision-making, they cannot substitute for the logic of good questions.[4] The results of comprehensive surveys of research studies in education have led to the amassing of impressive arrays of conflicting outcomes.[5]

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[4] John Tukey once wrote: " Bending the data to fit the analysis can be vital - as a saving of capital investment in ways of analysis, as a route that we can take today rather than at some unknown time to come. But bending the question to fit the analysis is to be shunned at all costs." (American Psychologist, 24, #2, February,1969)

[5] The Rand Report (Averch et al., 1972) commissioned for the President's recommendations for education examined many hundreds of research studies in education and concluded:" Research has not identified a variant of the existing system that is consistently related to students' educational outcomes." (Averch et al., 1972,p.154)

Snow (1974) reviewing reviews of outcomes cited the following: "Of 33 studies reviewed concerning the comparative effectiveness of teacher-centered vs. learner -centered classroom comparisons 8 favor the former, 11 the latter and 13 show no significant differences. Of 393 studies comparing televised with live classroom teaching 83 favor the former, 55 the latter and 255 showed no significant difference. Of 88 studies comparing lecture vs. discussion methods in college teaching 45 favor the former and 43 the latter. Of 19 studies of teacher expectancy 12 showed no effect on student behavior and 7 did. A final example comes from the Office of Economic Opportunity's study of performance contracting vs. conventional teaching. The study included some 25,000 students in Grades 1,2,3, 7,8 and 9 from 18 school districts around the United States.Research was conducted by six different companies using fairly similar methods ... One method of analysis showed 28 significant differences favoring the programmed performance contracting treatments, 60 favored traditional teaching and 124 were nonsignificant differences . "

Change too often suggests abrupt alteration. Moreover by looking at changes in dependent test scores we are assuming that a treatment has affected all subjects. Change is developmental. It is a consequence of three interacting components: (1) structural capacity, (2) eliciting stimulation, and (3) past learning. Change does not occur uniformly. This means that we cannot expect a uniform treatment to affect all children the same. This is important because we have acted in research as if "rational behavior therapy," "Duso kits", "open schools," or "programmed instruction" will have uniformly beneficial outcomes on all children. This kind of reasoning is similar to throwing mud against a wall and hoping it will all stick !

HO 8 Temperament-aptitude clusters are associated with risk-support dimensions and mediate susceptibility to treatment and change outcomes.[6]

Our research with the BCCI has led us to conclude provisionally that there are some clusters of temperament-aptitude characteristics in individuals that directly mediate the effects of guidance or learning interventions.[7]

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[6] Our research confirms the findings of other independent studies. For example, Buss and Plomin (1975) found they could document the existence of four major temperament components i.e., activity, emotionality sociability and impulsivity. Studying these characteristics by various methods and criteria over developmental stages they concluded that these factors are combined variously in all individuals. Bennett(1976) in an intensive study of teacher and student interactions and the outcomes of achievement and personality characteristics in England looked at "open" versus "traditional" schools and concluded that temperament-personality differences in both teachers and students were strong process variables mediating the outcome of achievement and personality development characteristics.

[7] These temperament-aptitude combinations were obtained by multiple discriminant analysis on over 5000 elementary school children. Six groupings were obtained on two bi-polar dimensions. The two bi-polar dimensions were energetic versus passive, and sociable versus individualistic.

These six groups may be summarily described as: (1) energetic-individualistic (low risk and average to high support), (2) energetic-social (low risk and high support), (3) passive-individualistic (high risk and average to low support) (4) passive-social (high risk and low support). Groups #5 and #6 represent combinations of #1 and # 2, and #3 and #4 respectively. Naturally, not every child in each group can be judged uniformly in terms of risk and support as described above, but the groupings in general tend to support an array of personal, peer support and teacher support characteristics plus suspected problems that justifies this overall description. For example, group #1 tends to have more problems in reticent and verbal communication. Group # 4 tends to have the highest proportion of self-control and behavioral problems. The multiple discriminant analysis procedure then identifies clusters of individuals who differ substantially on overall temperament characteristics, peer and teacher support, level of risk (as judged by the intensity and frequency of suspected problem areas), and rate of achievement. Figure 3 illustrates the rate of achievement observed on 100 boys and 100 girls in the Terre Haute Schools over a three year period of time. These children were in three different schools representing respectively a "traditional," "open" and "behavioral" format. Nonetheless, achievement rates by group were remarkably consistent across school.[8]

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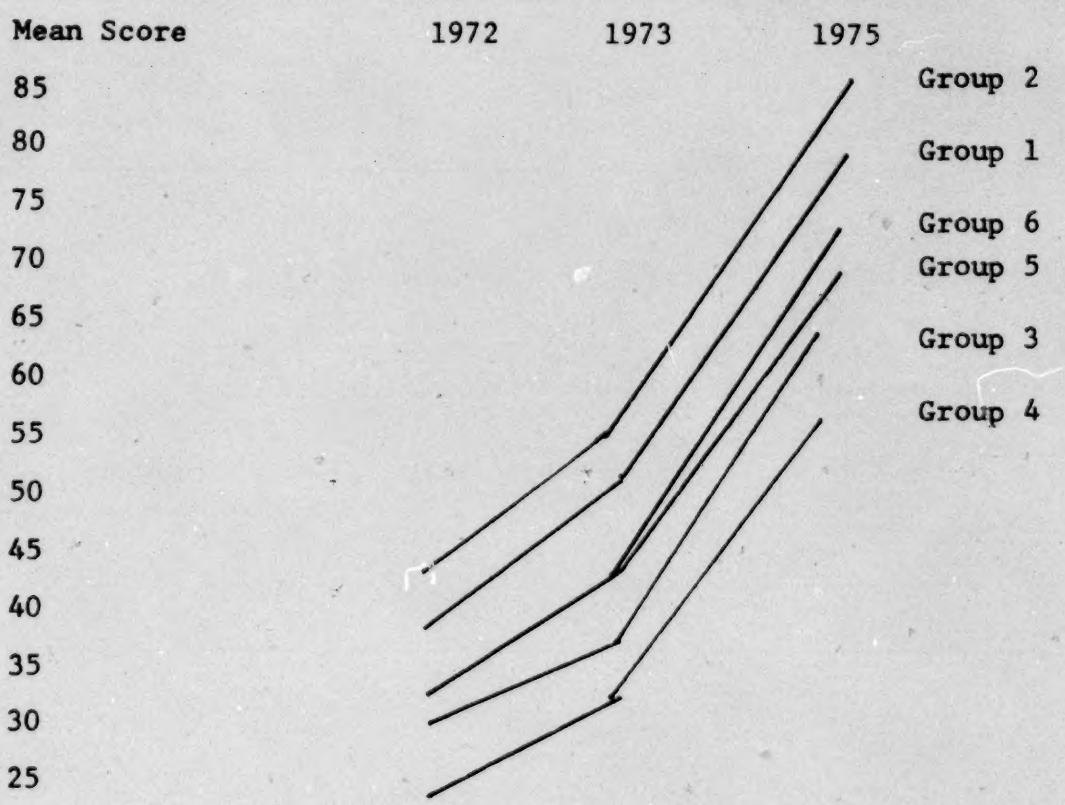
[8] A multivariate analysis of variance on posttest achievement scores covarying the effects of the earliest pre-test scores and partialing out the effects of sex, school treatment, and their interactions, showed uniformly results at the .0001 level for the effect of temperament-aptitude cluster on rate of achievement . Both Nelson Reading Test scores and Iowa Test of Educational Development sub-test scores were utilized with virtually identical results. Details of this study are reported in J.R. Barclay, The Psychology of Intervention, 1976.

Figure 3

Relationship of Achievement (Nelson Reading) to Temperament-Aptitude Groups Over a Three Year Period



N = 92 boys and 91 girls tested initially in the third grade and in 1975 in the sixth grade, while in the Terre Haute Indiana Public Schools.

Though results are provisional at this point, studies with two groups of children looking at the effects of planned interventions, suggest strongly that temperament-aptitude grouping mediates the effects of various interventions. Table 1 summarizes a number of both parametric and non-parametric approaches looking at change dimensions. The results may be summarized as follows:

1. Groups differ significantly in achievement even when pretest data from three years previously are covaried and the effect of school treatment and sex differences are partialed out.

2. Low-risk and high support children are relatively impervious to interim guidance treatments. Having already a good deal of psychological support, and a reasonably good adjustment to learning, they are not affected one way or the other.

3. High-risk and low support children are quite susceptible to treatments of a guidance nature implemented in the classroom. Males in this grouping appear to make more changes than females. Of the differences in treatments, males tend to make more positive changes via assertive training. Females exposed to assertive training tend to show an increase in problems and on the contrary those exposed to Duso type treatments show a decrease in problems.

The evidence which we are continuing to analyze appears to document the case that prescriptive interventions are most important for the high-risk and low support children. The comparative equality of several guidance intervention approaches with this group suggests two conclusions:(1) that a change in teacher treatment , attitude and expectations may be the major contributing cause of the improvement, and (2) that modeling as Bandura and Walters (1963) have suggested is most effective with children who have a past history of experiencing failure. Both conclusions support the contention of this paper that facilitating change in teachers via human relations training, and relevant feedback from needs assessment methods can be effective in reducing risk potential and increasing the support system.

Table 1

Summary of Research Findings
Regarding Differences in Groups

Method	High Risk Low-Support (# 3 and #4)	Low Risk High Support (#1 and #2)
Multivariate ANCOVA over three year period	Significantly lower rate of achievement on ITED & Nelson Reading Tests	Significantly higher rate of achievement on ITED and Nelson Reading Tests
Chi Square using specific groups x 3 school approaches (traditional, group, behavioral on frequency of pre and post BCCI problems.	Non-significant results	Non-significant results
Chi Square using specific groups x two guidance interventions Duso & Assertive training on frequency of pre and post BCCI problems.	Significantly more children in this group changed positively and showed a decrease in problems. Duso was slightly more effective than assertive training.	Significantly fewer individuals changed at all, but tended to remain the same, suggesting that neither treatment affected them.
Chi Square using specific groups x two guidance interventions by sex using frequency of pre and post BCCI problems.	Males in these groups showed significantly more positive changes.	Males in these groups showed significantly less change and tended to remain the same.
Chi Square using specific groups x two guidance interventions for males only using frequency of pre and post BCCI problems.	Tendency for males in these groups to show greater improvement via assertive training	Tendency for males in these groups in assertive training to remain the same.
Chi Square using specific groups x two guidance interventions for females only using frequency of pre and post BCCI problems.	Females in these groups showed an increase of problems via assertive training and a decrease of problems via Duso training.	

Note: The sample used to evaluate achievement and schooling differences consisted of 92 boys and 91 girls assessed in the Terre Haute Schools in 1972, 1973 and 1975. The sample used to evaluation consequences of guidance treatments consisted of approximately 250 fourth and fifth graders in a Georgia school tested pre and post in 1976-77. They are part of a Ph.D. dissertation study by Wayne Buffington in progress at the University of Kentucky.

HO 9 Change in affective-social skills can and should be measured by an array of indicators.

Because of the indeterminant nature of affective and social phenomena -specifically in the interactive matrix of modeling effects, socialization of the sexes, and differential expectations, social-affective development cannot rely simply on pre-post statistical measures. Admittedly where relevant measures are available such efforts are worthwhile. But the case for affective-social education should not be rested on raising mean achievement over the short term of an experimental intervention. Again, because of temperament-aptitude characteristics, one should not look for equal change in all subjects.

Our experience in developing a prevention model suggests to us that we should look at more subtle indicators. These can include a base rate of critical episodes (such as fights, expulsions, broken windows, confrontations, and other severe problem behaviors) taken for a period of time before system-wide or school-wide intervention begins. If preventive education works, there should be observed a marked decrease in such critical episodes.

Since a large part of this rationale focuses on attention to high-risk , low-support children, we suggest further that the focus of developmental change be on these subjects. Utilizing computer feedback it is possible to direct teacher attention to specific problem areas. A follow-up of these children can include redoing the needs assessment at a later date and comparing computer categories on a pre-post basis, and should include impressionistic data from either classroom observation, self-report from the students themselves, or parental opinion.

In this paper I have dealt chiefly with affective-social skill developent as a rationale. The conclusions that have been drawn with regard to the taxonomy of intervention have been built on a twenty year period of research by a number of individuals. In the appendix 50 published and unpublished studies are cited. Of these 23 studies are experimental in nature involving 8900 elementary school children. A variety of methods of analysis have been used including multivariate analysis of variance and covariance, multiple discriminant analysis, chi square, Fishers' exact test of significance, case studies and simple "t" tests of significance. Five of the studies (# 1,2,3, 20 and 35)[9] deal with the prediction of dropouts or referrals to child guidance clinics; twelve of the studies relate to the evaluation of the comparative effectiveness of training programs and various teacher implemented or counselor arranged interventions (# 17, 45, 46, 47, 31, 7, 30, 37, 38, 26, 41, 28 and the studies mentioned in table 1); and five studies relate to the effects of various conditions such as school organization, parental socio-economic status, teacher age and sex, and the inclusion of emotionally disturbed children in classrooms.

I believe that sufficient evidence exists for us to begin systematically to program and plan for social-affective education in the schools. The two major components that we must look at relate to the risk dimensions and support systems of children in the classroom. Our major source of treatment must relate to the more effective training and sensitization of teachers to individual differences. Our evaluation of the outcomes can be aided not only by formal statistical methods, but by prevention of crisis situations.

[9] Numbers refer to references in appendix.

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A P P E N D I X

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Chronology

1956	Need for early identification Detroit Suburb Schools	Sociometrics, Teacher Ratings, Kvaraceus Delinquency Proneness Test
	Testing in elementary schools. Use in Junior High for placement and limited group experiences	Sociometric + Teacher Ratings constitute an empirical base for evaluating support system
1957-59	Continued refinement & usage + re-testing.	Follow-up indicates stability of indices.
1959-64	Search for covariates of grid arrangement in interests, age, sex of teacher, & theoretical bases. (1),(2),(3),(4),(5) (25) (29),(35)	Distinctive set of interests associated with peer & teacher support. Teacher age & sex relate to quality of support system
1964-69	Recognition of need for specific peer choices in accordance with trait groupings. Exploration of environmental press (6) (39),(40)	Teacher press and expectations create different environments most specifically observed in secondary education.
	Attempts to use revised scale as measure of experimental treatments. (7), (8)	Intensity of treatment crucial.
	Recognition of need for computer synthesis, interpretation, & scoring.	Various efforts at Stanford. Completion of first program.
1970-71	Recognition of need for relating classification system to strategy interventions. (9) ,(10)	First attempts.
	Search for behavioral correlates (11), (21)	Evidence found.
	Search for relationship to paternal occupation. (22)	Evidence found.
	Research Compendium & Manual	(11), (12)
	Need for identification of "suspected problems" & analysis of groups, districts in ecological framework	(13),(14), (15) Classrooms, schools & districts differ using discriminant analysis methods

1970-71	Analysis of problems by district. (13),(14),(15)	Results show specific patterns of correlations. Factor analysis indicates teacher component largest source of "problem" variance.
1972-76	Application to individual group & district in technology & systems.	Systems approach developed & training methods. (42),(44),(46),(45),(47) (16),(17)
	Use of System for Evaluation of Change	(20),(26), (28)(30)(32) (37),(38),(41)
	Further exploration of classification system, & theory	(23), (24),(33),(43)
	Cross-cultural studies	Translated into Spanish & Chinese (50) (36)
	Longitudinal Prediction of Characteristics of Children & Intervention Needs. Identification of basic classifications of students & need for aptitude-treatment fit.	Findings of stability of temperament characteristics. Differential effects of treatment for different groups.(19),(20),(17),(18)
	Consequences of placing emotionally disturbed children back in regular classroom.	Findings suggest total climate altered.(27)
	Comparison of M.R. children in various settings self-contained, mainstreamed.(34)	Social support system for M.R. best in self-contained classrooms.

Summary of Experimental Studies

Study	Goals	Methods	N	Ind. Variable	Dep. Variable	Findings
1	To establish a method for identifying high risk, low support children	No. of studies	2189 el. & jr. hi.	SES, Interests of children, longitudinal prediction categories	Soc. & Teacher ratings	Sociometrics and teacher ratings provide a contextual framework for identifying support system and risk estimate
2	To identify interest patterns associated with high and low risk & high and low support children	X2 and "t"tests between items and groups	1777 el. & jr. hi	Soc. & TR	Interests in sports, television, movies, books,etc.	Dropouts and childre of lower SES tend to have different pattern of interests with dropouts favoring popular music TV programs etc.
3	To identify the predictive power of Soc.+ TR ratings over 4 years on academic achievement & dropout status	Tests of significance of difference + categories or ach. & holding power of school	868 jr. hi.	Soc. & TR + DAT	Dropout vs stay-in status	Over 30% of females and 50% of males who dropped out of school were in cell of lowest support & high risk. Differe pattern of ach. via DAT.
5	To identify charateristics of teachers i.e. age, and sex related to Soc. & TR in classroom.	"t" tests of sign.	2189 el. & jr. hi. 70 teachers	Age & Sex of teacher	Soc. & TR	Sig. differences found on classroom environments related to age and sex of teacher.
2	To identify the predictive power of Soc. & TR over 3 years	Tests of sig. diff. + ind. assessment by teachers	445 7th graders	Soc .+TR	Taylor Anxiety Scale/CPI / & Teacher Assessment.	Teachers identified low subjects 3 yrs after. No sig. diff. on Taylor Anxiety, but sig. diff on CPI.

Study	Goals	Methods	N	Ind. Variable	Dep. Variable	Findings
31 & 7	To compare classroom techniques for improving peer & teacher support for low support, high risk children	ANOVA &Fishers' Exact Test of sig.	97 hi risk lo support 5th graders	3 techniques: selective reinforcement; planned interventions; change of teach.	BCCI	Planned interventions in class appear to have effected more change.
20	To evaluate effectiveness of 3 school organizations on outcomes of achievement & support systems	ANCOVA Regressions on pre-post treatments over 3 yr duration	1200 orig. el. ss	Behavioral, traditional & "open" school format	BCCI Nelson Reading Test Iowa Tests of Ed. Dev.	Behavioral school initially lower in ach. erased reading problems differences, but did not do so on ITED. Many other findings
30	To compare the effectiveness of feedback (from printout), teacher praise (pos. reinf.) and parental support.	Mann-Whitney U Test	11 select. subjects	Alternate treatments	Self-Comp. scale of BCCI + group nom. & teacher ratings	Parental support (by coming to a meetin appeared to be most effective treatment
33	To identify interactive effects of intelligence, SES, beauty, race and sex on teacher ratings	5 way multivariate ANOVA	96 el. ss	Five factorial design	Teacher Ratings of BCCI	Complex pattern of interactive relations relating to expectation
37	To identify effects of alternate guidance approaches in promoting peer & teacher support and positive self concept	Two-tailed "t" tests pre & post	120 ss el.	Duso, Magic Circle, Guidance Readers, Value clarification	BCCI Piers Harris Self-Concept	Experimental school showed gain in Piers Harris and reduction of reticent shy behaviors (BCCI)
38	To compare results of alternate approaches in reducing shy and reticent behavior	ANOVA	40 ss identified as reticent from 6 classes tested.	Feedback, Group Couns., no feedback, no couns.	BCCI & Piers Harris + Suppl mat.	Group counseling using personalized affective learning segments sig. best with results on all dep. variables

Study	Goals	Methods	N	Ind. Variable	Dep.Variable	Findings
35	To identify predictive power of Soc + TR for referrals to Child Guidance Clinic	Tests of sig. diff. + criterion approximation	103 el. child.	Referral to Guidance Clinic	Soc.+ TR and risk-support status	High-risk, low-support children more often referred to clinic.
20	To identify the predictor charateristics of the BCCI for children with varying support & risk conditions	Regression equations + multiple dis. analysis	200 el.	Barclay Learning Needs Inventory + frequency of suspected prob.	BCCI	Children with high risk, and low support in pre-testing showed same characteristics in post-testing.
26 &41	To identify the most appropriate method for promoting change in risk and support conditions	ANOVA and Aptitude-Treatment methods	220 fifth	Three treatments: classroom seating re-arrangement, group couns. + career information	BCCI	Children in career info. (hi risk,lo support) showed more change in self,peer & teacher dimensions.
22	To identify parental & specific paternal status influence on support system and risk categories	Multivariate ANOVA	1377 el.	Holland's coding of paternal occupations	BCCI	Sig. differences exist between self-competency, peer and teacher support systems related to paternal occupation
28	To identify the comparative value of structured individual and group career counseling techniques	Multivariate ANOVA	42 Hi Risk Lo Supp. 5th graders	Two treatments on pre-post basis + sex	BCCI	Treatments were about equal in effect; females became more assertive and males less disruptiv
27	To identify effects of replacement of children formerly in emotionally handicapped classrooms in regular classrooms	ANOVA	240 children in 4 classes	Replacement of former E.H. children	BCCI	Classrooms where childre formerly treated as E.H. showed sign. more total problems indicating ripple effect.

Study	Goals	Methods	N	Ind.Variable	Dep. Variable	Findings
17 (pp.240-244)	To evaluate the effectiveness of feedback(computer printout) + teacher training and use of consultants in changing risk and support conditions in children	Multivariate analysis using pre testing as covariates + frequency of suspected problems	303 3rd 6th graders	Feedback & teacher training	BCCI & suspected problems pre and post one year in duration	Teacher implemented methods and curriculum approaches raised appropriate BCCI scores and reduced overall level of problems particularly in cognitiv attitudinal deficit area
17 (pp.233-234)	To evaluate diff. between inner city mixed racial school, suburban and private accelerated school	ANOVA pre and post	262 5th & 6th graders over one year period	Environment setting only	BCCI scores & suspected problems	Variety of findings showing increase of problems in suburban and private school.
45,46,47	To raise the effectiveness of teacher coping and intervention behavior via feedback & training	Variety of techniques	500-700 children over three year period (still continuing)	Training program + feedback	BCCI, Beh. observations impressions	Case studies and reports suggest change in individuals and groups
Barclay & Buffington as reported in table 1	Comparative analysis of sign changes relating to assertive & Duso treatments	X2 analysis on direction of change	450 students	Duso + Assertive training in classes Plus temp. groupings & sex	Direction of change on pre-post via suspected problems	Apparent changes in outcomes of treatment strongly related to temperament groups

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